Serial Number: 09/320,252

Filing Date: May 26, 1999

Title: METHODS AND APPARATUS FOR EXECUTING A TRANSACTION TASK WITHIN A TRANSACTION PROCESSING SYSTEM

EMPLOYING SYMMETRIC MULTIPROCESSORS

REMARKS

This responds to the Office Action mailed on May 6, 2005, and the references cited therewith.

Claims 1 and 9 are amended; Claims 2, 3, 4, 6, 14, 16-18, and 21-23 are canceled; as a result, claims 1, 5, 7-13, 15, 19-20, and 24-27 are now pending in this application.

§103 Rejection of the Claims

Claims 1, 2, 4, 7-13, 15, 17, 19, 20 and 24-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundaresan (U.S. 6,289,369) in view of Maresco (U.S. 6,418,458).

Applicants respectfully submit that claims 1, 2, 4, 7-13, 15, 17, 19, 20 and 24-27 should not be rejected under 35 U.S.C. § 103 for the reason that there is no motivation to modify the reference teachings.

To establish a **prima facie** case of **obviousness**, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Claim 1 includes the following limitation:

...the transaction task comprises a transaction routing task, responsive to a transaction request associated with the transaction event, that routes the transaction request to an agent of the transaction processing system.

The Office Action contends that the above limitation, previously appearing as claim 3, is anticipated by the combination of Sundaresan and Szlam. However, the proposed modification of Sundaresan based on Szlam renders Sundaresan unsatisfactory for its intended purpose.

If [the] proposed modification would render the prior art invention being modified unsatisfactory for the intended purpose, then there is no suggestion or motivation to make the proposed modification.

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MPEP 2143.01 citing in re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Sundaresan describes the following invention:

the present invention disclosesdynamically exploiting affinity, locality, and load balancing in scheduling the execution of multi-threaded user programs in a multi-processor computer system. Affinity, locality, and load balancing characteristics are specified at thread creation time and can be dynamically changed during thread execution, either by the user program itself or by any other process or entity with sufficient privileges and information. A central schedule queue and one or more perprocessor local schedule queues are used to schedule the threads based on the dynamically changing affinity, locality, and load balancing characteristics.

Sundaresan, Col 4, 53-63.

The above quote from Sundaresan describes schedule queues (e.g., central schedule queue, per-processor local schedule queue) that schedule threads (e.g., a stream of instructions executed by the computer on behalf of the computer program") (Sundaresan Col. 1, lines 21-23). The schedule queues may use characteristics (e.g., affinity, locality, and load balancing) provided by a user program or other processes to schedule the threads for execution. The central schedule queue may schedule a thread for execution on any available processor in a multi-processor computer system (Col. 8, lines 14-27).

Szlam describes the following invention:

A Composite Call Object is a software "container" which can be loaded with different types of information elements, or loaded with a description of information elements and references to the location of each of the information elements. A token representing this container, the Composite Call Object, can be <u>transferred from one location to another</u> as part of a series of related business transaction, somewhat similar to the transfer of a voice telephone call. As transactions are created and accumulate to accomplish the desired business process or function, the Composite Call Object collects relevant data, the information elements, so that a subsequent user has ready access to all of the information related to the business process or function being performed (emphasis added).

Szlam, Col. 3, lines 45-53.

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The above quote from Szlam describes a Composite Call Object. The Composite Call Object may be used to collect data for a business transaction. A token representing the Composite Call Object may be <u>transferred from one location to another</u> to "provide a new method which melds single, application-centric business transactions into uniform business processes that can monitor and track, even in cases <u>where the resources are widely distributed</u>" Col. 3, lines 37-42.

Szlam elaborates on the above described transferring:

The Composite Call Object also includes a Destination Key 315. This key 315 specifies the location where the Composite Call Object is to reside. This location may be specified by a human operator or may be specified automatically. The automatic specification may be, for example, the location where the process was initiated, the location where the last device or program or information was accessed, a business center in the area where the customer is located or the document is to be mailed or stored, or some repository based upon a geographical or business preference. Once the Composite Call Object has been assembled, then the Composite Call Object is transferred to the specified location. The Composite Call Object may be transferred over any available communications link which connects the location where the Composite Call Object currently resides and the destination location. Once the destination location has confirmed the receipt of the Composite Call Object then the present location may delete the Composite Call Object from its memory or send the Composite Call Object to another location to be archived (emphasis added).

Szlam Col. 14, lines 4-21.

The above quote from Szlam further elaborates on transferring the Composite Call Object. Specifically, the Composite Call Object specifies the location where the Composite Call Object is to reside or execute (see Figure 6 and accompanying text describing the business process mediator 307 which is a component of the Composite Call Object that executes tasks associated with the business process managed by the Composite Call Object).

The proposed modification of Sundaresan based on Szlam renders the Sundaresan unsatisfactory for its intended purpose. Sundaresan describes a central schedule queue that may schedule a thread for execution on any available processor in a multi-processor computer system (Col. 8, lines 14-27). In contrast, Szlam describes a Composite Call Object that specifies the

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location where the Composite Call Object is to execute. It follows that the invention described by Sundaresan would be unsatisfactory for its intended purpose if modified based on the invention described in Szlam because the schedule queues described in Sundaresan would contend with the Composite Call Object described in Szlam for selection of the location of execution.

The above remarks are also applicable to a consideration of independent claim 9.

In addition, if an independent claim is nonobvious under 35 U.S.C. § 103 then any claim depending there from is nonobvious and rejection of claims 4, 5, 6, 8, 10-13, 15, 17, 19-20, and 24-27 under 35 U.S.C. § 103 is also addressed by the above remarks.

In summary, Sundaresan cannot be combined Szlam as required to support rejections of the independent claims of the present application under 35 U.S.C. § 103.

Claims 3 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundaresan and Maresco as applied to claims 1, 2 and 9 above, and in view of Szlam et al. (U.S. 6,314,089). Claims 3 and 16 depend on independent claims 1 and 9 respectively. The above remarks are accordingly also applicable to a consideration of these claims.

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Sundaresan and Maresco as applied to claims 1, above, and in view of Sequeira (6,222,530). Claims 5 depends on independent claim 1. The above remarks are accordingly also applicable to a consideration of claim 5.

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CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney at 408.846.8871 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 9/6/2005

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450,

Alexandria, VA 22313-1450, on this day of September, 2005.

Name

Signature